



General

Guideline Title

Screening for bladder cancer: U.S. Preventive Services Task Force recommendation statement.

Bibliographic Source(s)

Moyer VA, on behalf of the U.S. Preventive Services Task Force. Screening for bladder cancer: U.S. Preventive Services Task Force recommendation statement. Ann Intern Med. 2011 Aug 16;155(4):246-251. [PubMed](#)

Guideline Status

This is the current release of the guideline.

This version updates a previously published guideline: U.S. Preventive Services Task Force (USPSTF). Screening for bladder cancer in adults: recommendation statement. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2004 Jun. 5 p. [3 references]

Recommendations

Major Recommendations

The U.S. Preventive Services Task Force (USPSTF) grades its recommendations (A, B, C, D, or I) and identifies the levels of certainty regarding net benefit (High, Moderate, and Low). The definitions of these grades can be found at the end of the "Major Recommendations" field.

Summary of Recommendation and Evidence

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for bladder cancer in asymptomatic adults (I Statement).

Clinical Considerations

Patient Population under Consideration

This recommendation applies to asymptomatic adults. Although adults with mild lower urinary tract symptoms (such as urinary frequency, hesitancy, urgency, dysuria, or nocturia) are not strictly asymptomatic, these symptoms are quite common and are not believed to be associated with an increased risk for bladder cancer. The USPSTF considered it reasonable to include these persons in the population under consideration for screening. Adults with gross hematuria or acute changes in lower urinary tract symptoms are not included in this population.

Screening Tests

Primary care–feasible screening tests for bladder cancer include identifying hematuria with a urine dipstick or microscopic urinalysis, urine cytology,

and tests for urine biomarkers.

Treatment

Once bladder cancer has been diagnosed, several factors determine treatment, including tumor grade, cancer stage (superficial vs. invasive), whether the tumor is recurrent, the patient's age and overall health status, and patient and physician preferences. The principal treatment for superficial (Ta or T1) bladder cancer is transurethral resection of the bladder tumor, which may be combined with adjuvant radiation therapy, intravesical chemotherapy, immunotherapy, or photodynamic therapies. Radical cystectomy, often with adjuvant or neoadjuvant systemic chemotherapy, is used in cases of surgically resectable invasive bladder cancer.

Suggestions for Practice Regarding the I Statement

In deciding whether to screen for bladder cancer, clinicians should consider the following.

Potential Preventable Burden

Bladder cancer is similar to many other types of cancer in that it is a heterogeneous condition. Approximately 70% of all cases of newly diagnosed transitional cell carcinomas present as superficial tumors (including in situ); some of these tumors may never progress to advanced disease. However, some cases of bladder cancer invade the muscle tissue, progress, and metastasize; treatment has limited efficacy in these cases. Early detection of tumors with malignant potential may have an important effect on the mortality rate of bladder cancer. One challenge of screening for bladder cancer is accurately identifying cases of early-stage cancer (subepithelial and in situ) with a high risk for progression. Another area of uncertainty is determining whether providing earlier, less toxic treatment (such as immunotherapy) with the intention of preventing symptomatic progression results in fewer overall harms to the patient than providing more toxic treatment (such as radical cystectomy) only to those patients who develop symptomatic or advanced tumors. Persons at increased risk for bladder cancer include those who work in the rubber, chemical, or leather industries, as well as those who smoke, are male, are older in age, or have a family or personal history of bladder cancer.

Potential Harms

False-positive test results may result in anxiety and unneeded evaluations, diagnostic-related harms from cystoscopy and biopsy, harms from labeling or unnecessary treatments (such as transurethral resection of a bladder tumor, intravesical chemotherapy, or biologic therapies), and overdiagnosis.

Current Practice

Screening tests feasible for use in primary care include urine dipstick or microscopic urinalysis for hematuria, urine cytology, and tests for urine biomarkers. Tests for urine biomarkers are not commonly used in primary care in part because of their cost, although this varies substantially. Patients with positive screening results are typically referred to a urologist for further evaluation, which may include cystoscopy (and biopsy if a tumor is found), imaging, and other studies.

Definitions:

What the U.S. Preventive Services Task Force (USPSTF) Grades Mean and Suggestions for Practice

Grade	Grade Definitions	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is moderate or high certainty that the net benefit is small.	Offer or provide this service only if other considerations support offering or providing the service in an individual patient.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.

Grade Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read the "Clinical Considerations" section of USPSTF Suggestions for Practice Recommendation Statement (see "Major Recommendations" field). If this service is offered, patients should understand the uncertainty about the balance of benefits and harms.
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USPSTF Levels of Certainty Regarding Net Benefit

Definition: The USPSTF defines certainty as "likelihood that the USPSTF assessment of the net benefit of a preventive service is correct." The net benefit is defined as benefit minus harm of the preventive service as implemented in a general, primary care population. The USPSTF assigns a certainty level based on the nature of the overall evidence available to assess the net benefit of a preventive service.

Level of Certainty	Description
High	The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.
Moderate	<p>The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by factors such as:</p> <ul style="list-style-type: none"> • The number, size, or quality of individual studies • Inconsistency of findings across individual studies • Limited generalizability of findings to routine primary care practice • Lack of coherence in the chain of evidence <p>As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.</p>
Low	<p>The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of:</p> <ul style="list-style-type: none"> • The limited number or size of studies • Important flaws in study design or methods • Inconsistency of findings across individual studies • Gaps in the chain of evidence • Findings not generalizable to routine primary care practice • A lack of information on important health outcomes <p>More information may allow an estimation of effects on health outcomes.</p>

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Bladder cancer

Guideline Category

Prevention

Screening

Clinical Specialty

Family Practice

Internal Medicine

Oncology

Preventive Medicine

Urology

Intended Users

Advanced Practice Nurses

Allied Health Personnel

Nurses

Physician Assistants

Physicians

Guideline Objective(s)

- To summarize the U.S. Preventive Services Task Force (USPSTF) recommendations on screening for bladder cancer in adults and the supporting scientific evidence
- To update the 2004 USPSTF recommendation statement on screening for bladder cancer

Target Population

Asymptomatic adults seen in primary care settings

Interventions and Practices Considered

Screening for bladder cancer using screening tests such as microscopic urinalysis, urine dipstick, urine cytology, and tests for urine biomarkers

Major Outcomes Considered

Key Question 1: Is there direct evidence that screening for bladder cancer reduces morbidity or mortality?

Key Question 2: What are the accuracy and reliability of urinalysis for hematuria, urine cytology, and urine biomarkers for identification of bladder cancer?

Key Question 3: Does treatment of screen-detected bladder cancer reduce morbidity and mortality from this disease?

Key Question 4: What are the harms of screening for bladder cancer and treatment of screen-detected bladder cancer?

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic evidence review was prepared by the Oregon Evidence-based Practice Center (EPC) for the Agency for Healthcare Research and Quality (AHRQ) for use by the U.S. Preventive Services Task Force (USPSTF) (see the "Availability of Companion Documents" field).

Data Sources

EPC staff searched Ovid MEDLINE from 2002 to December 2009, the Cochrane Database of Systematic Reviews and the Cochrane Central Register of Controlled Trials through the fourth quarter of 2009, and the CancerLit subsection of PubMed through March 2010 to identify relevant articles (see Appendix 1 of the evidence review). They identified additional studies from citations in relevant articles, including the previous USPSTF review. Searches were limited to English-language studies.

Study Selection

EPC staff selected studies pertaining to screening, diagnosis, and treatment of bladder cancer based on pre-defined inclusion and exclusion criteria (see Appendix 2 of the evidence review). Two reviewers evaluated each study at the title/abstract and full-text article stages to determine eligibility for inclusion. The flow of studies from initial identification of titles and abstracts to final inclusion or exclusion is diagrammed in Appendix 3 of the evidence review. Reviewers defined the target population as asymptomatic persons older than 50 years of age. The focus was studies performed in primary care settings, but studies conducted in occupational settings were also included. Studies that enrolled patients with recurrent bladder cancer were excluded. Reviewers also excluded studies that enrolled patients with gross hematuria, dysuria, or other signs or symptoms associated with bladder cancer, as these were considered symptomatic and therefore outside the scope of screening. Studies that enrolled a mixed population of asymptomatic and symptomatic individuals were included if results were reported separately for asymptomatic patients without previous bladder cancer, or if >85 percent of enrollees satisfied these criteria. Outcomes of interest were morbidity and mortality and adverse events related to screening or treatment, and measures of diagnostic accuracy for screening tests.

Reviewers included randomized, controlled trials and controlled observational studies (cohort and case control studies) that directly assessed effects of bladder cancer screening compared to not screening on morbidity, mortality, or harms. They also included studies that evaluated the diagnostic accuracy of urinalysis for hematuria, cytology, and urinary biomarkers compared to results of cystoscopy. For treatment, reviewers focused on randomized, controlled trials and controlled observational studies comparing benefits and harms of transurethral resection of bladder tumor (TURBT) and/or intravesical therapy compared to no treatment for screen-detected or superficial bladder cancer (the type most likely to be detected by screening and amenable to early treatment). They restricted the review to published studies available in the English language. Studies that were excluded after review of the full-text articles and reasons for exclusion are listed in Appendix 4 of the evidence review.

Number of Source Documents

Three studies (four publications) were included, relevant to Key Question 1.

Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus

Rating Scheme for the Strength of the Evidence

Not applicable

Methods Used to Analyze the Evidence

Description of the Methods Used to Analyze the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic evidence review was prepared by the Oregon Evidence-based Practice Center (EPC) for the Agency for Healthcare Research and Quality (AHRQ) for use by the U.S. Preventive Services Task Force (USPSTF) (see the "Availability of Companion Documents" field).

Data Extraction

EPC staff abstracted details about the patient population, study design, data analysis, follow-up, and results. One author abstracted data and another author verified data abstraction for accuracy. They used predefined criteria developed by the USPSTF to assess the risk of bias (quality) of studies (Appendix 5 of the evidence review). For randomized trials, authors assessed methods of randomization, allocation concealment, and blinding; loss to follow-up; and use of intention-to-treat analysis. Two authors independently rated the internal validity of each study as "good," "fair," or "poor" based on the number and seriousness of methodological shortcomings. When data were available from diagnostic accuracy studies, they used the *diagti* procedure in Stata (Stata version 10, StataCorp, College Station, TX) to calculate sensitivities, specificities, and likelihood ratios. For all studies, authors evaluated applicability to populations likely to be encountered in primary care screening settings, based on whether patients were recruited from primary care or community settings, the proportion of patients with signs or symptoms suggesting bladder cancer, occupational exposures, the stage of bladder cancer, and the proportion of patients with a previous bladder cancer diagnosis. Discrepancies in quality ratings were resolved by discussion and consensus.

Data Synthesis

EPC staff assessed the overall strength of the body of evidence for each Key Question ("good," "fair," or "poor"), or part of a Key Question, using methods developed by the USPSTF, based on the number, quality, and size of studies, consistency of results between studies, and directness of evidence. Because few studies met inclusion criteria, results were not quantitatively pooled.

Methods Used to Formulate the Recommendations

Balance Sheets

Expert Consensus

Description of Methods Used to Formulate the Recommendations

The U.S. Preventive Services Task Force (USPSTF) systematically reviews the evidence concerning both the benefits and harms of widespread implementation of a preventive service. It then assesses the certainty of the evidence and the magnitude of the benefits and harms. On the basis of this assessment, the USPSTF assigns a letter grade to each preventive service signifying its recommendation about provision of the service (see Table below). An important, but often challenging, step is determining the balance between benefits and harms to estimate "net benefit" (that is, benefits minus harms).

Table 1. U.S. Preventive Services Task Force Recommendation Grid*

Certainty of Net Benefit	Magnitude of Net Benefit			
	Substantial	Moderate	Small	Zero/Negative
High	A	B	C	D
Moderate	B	B	C	D
Low	Insufficient			

*A, B, C, D, and I (*Insufficient*) represent the letter grades of recommendation or of insufficient evidence assigned by the U.S. Preventive Services Task Force after assessing certainty and magnitude of net benefit of the service (see the "Rating Scheme for the Strength of the Recommendations" field).

The overarching question that the USPSTF seeks to answer for every preventive service is whether evidence suggests that provision of the service would improve health outcomes if implemented in a general primary care population. For screening topics, this standard could be met by a large randomized, controlled trial (RCT) in a representative asymptomatic population with follow-up of all members of both the group "invited for screening" and the group "not invited for screening."

Direct RCT evidence about screening is often unavailable, so the USPSTF considers indirect evidence. To guide its selection of indirect evidence, the USPSTF constructs a "chain of evidence" within an analytic framework. For each key question, the body of pertinent literature is critically appraised, focusing on the following 6 questions:

1. Do the studies have the appropriate research design to answer the key question(s)?
2. To what extent are the existing studies of high quality? (i.e., what is the internal validity?)
3. To what extent are the results of the studies generalizable to the general U.S. primary care population and situation? (i.e., what is the external validity?)
4. How many studies have been conducted that address the key question(s)? How large are the studies? (i.e., what is the precision of the evidence?)
5. How consistent are the results of the studies?
6. Are there additional factors that assist the USPSTF in drawing conclusions (e.g., presence or absence of dose-response effects, fit within a biologic model)?

The next step in the process is to use the evidence from the key questions to assess whether there would be net benefit if the service were implemented. In 2001, the USPSTF published an article that documented its systematic processes of evidence evaluation and recommendation development. At that time, the USPSTF's overall assessment of evidence was described as good, fair, or poor. The USPSTF realized that this rating seemed to apply only to how well studies were conducted and did not fully capture all of the issues that go into an overall assessment of the evidence about net benefit. To avoid confusion, the USPSTF has changed its terminology. Whereas individual study quality will continue to be characterized as good, fair, or poor, the term *certainty* will now be used to describe the USPSTF's assessment of the overall body of evidence about net benefit of a preventive service and the likelihood that the assessment is correct. Certainty will be determined by considering all 6 questions listed above; the judgment about certainty will be described as high, moderate, or low.

In making its assessment of certainty about net benefit, the evaluation of the evidence from each key question plays a primary role. It is important to note that the USPSTF makes recommendations for real-world medical practice in the United States and must determine to what extent the evidence for each key question—even evidence from screening RCTs or treatment RCTs—can be applied to the general primary care population. Frequently, studies are conducted in highly selected populations under special conditions. The USPSTF must consider differences between the general primary care population and the populations studied in RCTs and make judgments about the likelihood of observing the same effect in actual practice.

It is also important to note that one of the key questions in the analytic framework refers to the potential harms of the preventive service. The USPSTF considers the evidence about the benefits and harms of preventive services separately and equally. Data about harms are often obtained from observational studies because harms observed in RCTs may not be representative of those found in usual practice and because some harms are not completely measured and reported in RCTs.

Putting the body of evidence for all key questions together as a chain, the USPSTF assesses the certainty of net benefit of a preventive service by asking the 6 major questions listed above. The USPSTF would rate a body of convincing evidence about the benefits of a service that, for example, derives from several RCTs of screening in which the estimate of benefits can be generalized to the general primary care population as "high" certainty (see the "Rating Scheme for the Strength of Recommendations" field). The USPSTF would rate a body of evidence that was not clearly applicable to general practice or has other defects in quality, research design, or consistency of studies as "moderate" certainty. Certainty is "low" when, for example, there are gaps in the evidence linking parts of the analytic framework, when evidence to determine the harms of treatment is unavailable, or when evidence about the benefits of treatment is insufficient. Table 4 in the methodology document listed below (see the "Availability of Companion Documents" field) summarizes the current terminology used by the USPSTF to describe the critical assessment of evidence at all 3 levels: individual studies, key questions, and overall certainty of net benefit of the preventive service.

Sawaya GF et al. Update on the methods of the U.S. Preventive Services Task Force: estimating certainty and magnitude of net benefit. *Ann Intern Med.* 2007;147:871-875. [5 references].

I Statements

For I statements, the USPSTF has a new plan to commission its Evidence-based Practice Centers to collect information in 4 domains pertinent to clinical decisions about prevention and to report this information routinely. This plan is described in the paper: Petitti DB et al. Update on the

methods of the U.S. Preventive Services Task Force: insufficient evidence. *Ann Intern Med.* 2009;150:199-205. <http://annals.org/article.aspx?articleid=744255> .

The first domain is potential preventable burden of suffering from the condition. When evidence is insufficient, provision of an intervention designed to prevent a serious condition (such as dementia) might be viewed more favorably than provision of a service designed to prevent a condition that does not cause as much suffering (such as rash). The USPSTF recognized that "burden of suffering" is subjective and involves judgment. In clinical settings, it should be informed by patient values and concerns.

The second domain is potential harm of the intervention. When evidence is insufficient, an intervention with a large potential for harm (such as major surgery) might be viewed less favorably than an intervention with a small potential for harm (such as advice to watch less television). The USPSTF again acknowledges the subjective nature and the difficulty of assessing potential harms: for example, how bad is a "mild" stroke?

The third domain is cost—not just monetary cost, but opportunity cost, in particular the amount of time a provider spends to provide the service, the amount of time the patient spends to partake of it, and the benefits that might derive from alternative uses of the time or money for patients, clinicians, or systems. Consideration of clinician time is especially important for preventive services with only insufficient evidence because providing them could "crowd out" provision of preventive services with proven value, services for conditions that require immediate action, or services more desired by the patient. For example, a decision to routinely inspect the skin could take up the time available to discuss smoking cessation, or to address an acute problem or a minor injury that the patient considers important.

The fourth domain is current practice. This domain was chosen because it is important to clinicians for at least 2 reasons. Clinicians justifiably fear that not doing something that is done on a widespread basis in the community may lead to litigation. More important, addressing patient expectations is a crucial part of the clinician–patient relationship in terms of building trust and developing a collaborative therapeutic relationship. The consequences of not providing a service that is neither widely available nor widely used are less serious than not providing a service accepted by the medical profession and thus expected by patients. Furthermore, ingrained care practices are difficult to change, and efforts should preferentially be directed to changing those practices for which the evidence to support change is compelling.

Although the reviewers did not explicitly recognize it when these domains were chosen, the domains all involve consideration of the potential consequences—for patients, clinicians, and systems—of providing or not providing a service. Others writing about medical decision making in the face of uncertainty have suggested that the consequences of action or inaction should play a prominent role in decisions.

Rating Scheme for the Strength of the Recommendations

What the U.S. Preventive Services Task Force (USPSTF) Grades Mean and Suggestions for Practice

Grade	Grade Definitions	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is moderate or high certainty that the net benefit is small.	Offer or provide this service only if other considerations support offering or providing the service in an individual patient.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read the "Clinical Considerations" section of USPSTF Recommendation Statement (see "Major Recommendations" field). If this service is offered, patients should understand the uncertainty about the balance of benefits and harms.

USPSTF Levels of Certainty Regarding Net Benefit

Definition: The USPSTF defines certainty as "likelihood that the USPSTF assessment of the net benefit of a preventive service is correct." The net benefit is defined as benefit minus harm of the preventive service as implemented in a general, primary care population. The USPSTF assigns a certainty level based on the nature of the overall evidence available to assess the net benefit of a preventive service.

Level of Certainty	Description
High	The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.
Moderate	<p>The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by factors such as:</p> <ul style="list-style-type: none">• The number, size, or quality of individual studies• Inconsistency of findings across individual studies• Limited generalizability of findings to routine primary care practice• Lack of coherence in the chain of evidence <p>As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.</p>
Low	<p>The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of:</p> <ul style="list-style-type: none">• The limited number or size of studies• Important flaws in study design or methods• Inconsistency of findings across individual studies• Gaps in the chain of evidence• Findings not generalizable to routine primary care practice• A lack of information on important health outcomes <p>More information may allow an estimation of effects on health outcomes.</p>

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Comparison with Guidelines from Other Groups

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

Peer Review. Before the U.S. Preventive Services Task Force (USPSTF) makes its final determinations about recommendations on a given preventive service, the Evidence-based Practice Center and the Agency for Healthcare Research and Quality send a draft systematic evidence review to 4 to 6 external experts and to federal agencies and professional and disease-based health organizations with interests in the topic. They ask the experts to examine the review critically for accuracy and completeness and to respond to a series of specific questions about the document. After assembling these external review comments and documenting the proposed response to key comments, the topic team presents this information to the Task Force in memo form. In this way, the Task Force can consider these external comments and a final version of the systematic review before it votes on its recommendations about the service. Draft recommendations are then circulated for comment from

reviewers representing professional societies, voluntary organizations and Federal agencies. These comments are discussed before the whole USPSTF before final recommendations are confirmed.

Response to Public Comments. A draft of this recommendation statement was posted for public comment on the USPSTF Web site from 30 November 2010 to 28 December 2010. Six comments were received from individuals or organizations. All comments were reviewed during the creation of this final document. Specifically, input from clinical specialists led to changes in the description of treatments. In general, the comments supported the USPSTF's specified research agenda.

Comparison with Guidelines from Other Groups. Recommendations for screening for bladder cancer from the following groups were discussed: the European Association of Urology and the American Cancer Society.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is not specifically stated for each recommendation.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Benefits of Detection and Early Intervention

The U.S. Preventive Services Task Force (USPSTF) found inadequate evidence that screening for bladder cancer or treatment of screen-detected bladder cancer leads to improved disease-specific or overall morbidity or mortality.

Potential Harms

Harms of Detection and Early Intervention

Screening may yield false-positive results. False-positive results may lead to anxiety, labeling, pain, and additional complications that result from diagnostic cystoscopy and biopsy (such as bladder perforation, bleeding, and infection) or imaging (such as adverse effects related to the use of intravenous contrast). The U.S. Preventive Services Task Force (USPSTF) found inadequate evidence on the harms of screening for bladder cancer. Evidence on the harms associated with early treatment, which may occur more frequently with greater detection of cases of early-stage cancer, is also inadequate.

Qualifying Statements

Qualifying Statements

- The U.S. Preventive Services Task Force (USPSTF) makes recommendations about preventive care services for patients without recognized signs or symptoms of the target condition.
- Recommendations are based on a systematic review of the evidence of the benefits and harms and an assessment of the net benefit of the service.
- The USPSTF recognizes that clinical or policy decisions involve more considerations than this body of evidence alone. Clinicians and policymakers should understand the evidence but individualize decision making to the specific patient or situation.
- Recommendations made by the USPSTF are independent of the U.S. government. They should not be construed as an official position of the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.

Implementation of the Guideline

Description of Implementation Strategy

The experiences of the first and second U.S. Preventive Services Task Force (USPSTF), as well as that of other evidence-based guideline efforts, have highlighted the importance of identifying effective ways to implement clinical recommendations. Practice guidelines are relatively weak tools for changing clinical practice when used in isolation. To effect change, guidelines must be coupled with strategies to improve their acceptance and feasibility. Such strategies include enlisting the support of local opinion leaders, using reminder systems for clinicians and patients, adopting standing orders, and audit and feedback of information to clinicians about their compliance with recommended practice.

In the case of preventive services guidelines, implementation needs to go beyond traditional dissemination and promotion efforts to recognize the added patient and clinician barriers that affect preventive care. These include clinicians' ambivalence about whether preventive medicine is part of their job, the psychological and practical challenges that patients face in changing behaviors, lack of access to health care or of insurance coverage for preventive services for some patients, competing pressures within the context of shorter office visits, and the lack of organized systems in most practices to ensure the delivery of recommended preventive care.

Dissemination strategies have changed dramatically in this age of electronic information. While recognizing the continuing value of journals and other print formats for dissemination, the USPSTF Task Force will make all its products available through its [Web site](#) . The combination of electronic access and extensive material in the public domain should make it easier for a broad audience of users to access USPSTF materials and adapt them for their local needs. Online access to USPSTF products also opens up new possibilities for the appearance of the annual, pocket-size *Guide to Clinical Preventive Services*.

To be successful, approaches for implementing prevention have to be tailored to the local level and deal with the specific barriers at a given site, typically requiring the redesign of systems of care. Such a systems approach to prevention has had notable success in established staff-model health maintenance organizations, by addressing organization of care, emphasizing a philosophy of prevention, and altering the training and incentives for clinicians. Staff-model plans also benefit from integrated information systems that can track the use of needed services and generate automatic reminders aimed at patients and clinicians, some of the most consistently successful interventions. Information systems remain a major challenge for individual clinicians' offices, however, as well as for looser affiliations of practices in network-model managed care and independent practice associations, where data on patient visits, referrals, and test results are not always centralized.

Implementation Tools

Mobile Device Resources

Patient Resources

Pocket Guide/Reference Cards

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Moyer VA, on behalf of the U.S. Preventive Services Task Force. Screening for bladder cancer: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med.* 2011 Aug 16;155(4):246-251. [PubMed](#)

Adaptation

Not applicable: The guideline is not adapted from another source.

Date Released

1996 (revised 2011 Aug 16)

Guideline Developer(s)

U.S. Preventive Services Task Force - Independent Expert Panel

Guideline Developer Comment

The U.S. Preventive Services Task Force (USPSTF) is a federally-appointed panel of independent experts. Conclusions of the USPSTF do not necessarily reflect policy of the U.S. Department of Health and Human Services (DHHS) or DHHS agencies.

Source(s) of Funding

United States Government

Guideline Committee

U.S. Preventive Services Task Force (USPSTF)

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**Members of the USPSTF at the time this recommendation was finalized. For a list of current Task Force members, go to <http://www.uspreventiveservicestaskforce.org/Page/Name/our-members> .*

Financial Disclosures/Conflicts of Interest

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Guideline Endorser(s)

American Academy of Family Physicians - Medical Specialty Society

Guideline Status

This is the current release of the guideline.

This version updates a previously published guideline: U.S. Preventive Services Task Force (USPSTF). Screening for bladder cancer in adults: recommendation statement. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2004 Jun. 5 p. [3 references]

Guideline Availability

Electronic copies: Available from the [Annals of Internal Medicine Web site](#) .

Availability of Companion Documents

The following are available:

Evidence Reviews:

- Chou R, Dana T. Screening adults for bladder cancer: update of the 2004 evidence review for the U.S. Preventive Services Task Force. Evidence Synthesis No. 78. AHRQ Publication No. 11-05148-EF-1. Rockville, MD: Agency for Healthcare Research and Quality; October 2010.
- Chou R, Dana T. Screening adults for bladder cancer: update of the 2004 evidence review for the U.S. Preventive Services Task Force. Ann Intern Med 2010;153:461-468.

Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](#) .

Background Articles:

- Barton MB et al. How to read the new recommendation statement: methods update from the U.S. Preventive Services Task Force. Ann Intern Med 2007;147:123-127.
- Guirguis-Blake J et al. Current processes of the U.S. Preventive Services Task Force: refining evidence-based recommendation development. Ann Intern Med 2007;147:117-122.
- Sawaya GF et al. Update on the methods of the U.S. Preventive Services Task Force: estimating certainty and magnitude of net benefit. Ann Intern Med 2007;147:871-875.
- Petitti DB et al. Update on the methods of the U.S. Preventive Services Task Force: insufficient evidence. Ann Intern Med. 2009;150:199-205.

Electronic copies: Available from the [USPSTF Web site](#) .

The following are also available:

- Screening for bladder cancer: clinical summary of U.S. Preventive Services Task Force recommendation. Rockville (MD): Agency for

Healthcare Research and Quality (AHRQ); 2011 Aug. Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](#) .

- The guide to clinical preventive services, 2010-2011. Recommendations of the U.S. Preventive Services Task Force. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2010. 292 p. Electronic copies: Available from the [AHRQ Web site](#) . See the related QualityTool summary on the [Health Care Innovations Exchange Web site](#) .

The [Electronic Preventive Services Selector \(ePSS\)](#) , available as a PDA application and a web-based tool, is a quick hands-on tool designed to help primary care clinicians identify the screening, counseling, and preventive medication services that are appropriate for their patients. It is based on current recommendations of the USPSTF and can be searched by specific patient characteristics, such as age, sex, and selected behavioral risk factors.

Patient Resources

The following are available:

- Screening for bladder cancer: recommendations from the U.S. Preventive Services Task Force. Summaries for patients. Available from the [Annals of Internal Medicine Web site](#) .
- Women: stay healthy at any age. Rockville (MD): Agency for Healthcare Research and Quality. AHRQ Pub. No. 10-IP002-A. 2010 Aug. 2 p. Electronic copies: Available in Portable Document Format (PDF) in [English](#) and [Spanish](#) from the U.S. Preventive Services Task Force Web site. See the related QualityTool summary on the [Health Care Innovations Exchange Web site](#) .
- Men: stay healthy at any age. Rockville (MD): Agency for Healthcare Research and Quality. AHRQ Pub. No. 10-IP004-A. 2010 Aug. 2 p. Electronic copies: Available in PDF in [English](#) and [Spanish](#) from the U.S. Preventive Services Task Force Web site. See the related QualityTool summary on the [Health Care Innovations Exchange Web site](#) .

Print copies: Available from the AHRQ Publications Clearinghouse. For more information, go to <http://www.ahrq.gov/research/publications/index.html> or call 1-800-358-9295 (U.S. only).

Myhealthfinder is a new tool that provides personalized recommendations for clinical preventive services specific to the user's age, gender, and pregnancy status. It features evidence-based recommendations from the USPSTF and is available at www.healthfinder.gov .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

This summary was completed by ECRI on June 30, 1998. The information was verified by the guideline developer on December 1, 1998. This summary was updated by ECRI on June 24, 2004. This NGC summary was updated by ECRI Institute on October 12, 2011. The information was verified by the guideline developer on October 24, 2011.

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